Amendment dated May 5, 2009 After Final Office Action of February 5, 2009

AMENDMENTS TO THE CLAIMS

(Currently Amended) An enclosed light source device, comprising:

an arc tube having a pair of main electrodes arranged on one electrode axis with leads of

the main electrodes sealed with sealed portions; and

a reflector for reflecting an outgoing light emitted from the arc tube and emitting the

reflected light to the front, the electrode axis of the main electrodes being arranged to cross an

optical axis of the outgoing light, the reflector being formed of a metal substrate and being

constructed so that a light source fitting space for holding the sealed portions of the arc tube in a

manner that allows heat from the arc tube to be conducted to the reflector is formed, a first

reflector portion being formed with a spherical surface centered at a light generation point of the

arc tube is formed on a rear side from the arc tube as a boundary, a second reflector portion,

being a single reflector,[[being]] formed with an ellipsoid formed in front of the boundary of the

arc tube, and the outgoing light emitted from the arc tube being reflected by the first and second

reflector portions so that the reflected light of the first reflector portion reaches a predetermined condensed spot outside the reflector and the light reflected of the second reflector portion

directly reaches the predetermined condensed spot; and

a lens, provided inside the second reflector portion, that condenses all of the outgoing

light not reflected by the second reflector portion, such that the condensed outgoing light is

directed to the predetermined condensed spot, and includes a glass material that will not

deteriorate under a high-temperature atmosphere in a vicinity of the arc tube.

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2. (Previously Presented) The enclosed light source device according to Claim 1, wherein

the lens is positioned so that a principal point thereof is located on the optical axis while a

periphery of the lens is located at a position at which, of the outgoing light beams emitted

forwards from the arc tube, the light beam illuminating a vicinity of an opening of the second

reflector portion intersects the light beam that is reflected at an innermost position of the second

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reflector and brought to the condensed spot.

3.-4. (Cancelled)

5. (Previously Presented) The enclosed light source device according to Claim 1, wherein

a luminance equalization means for equalizing a surface luminance of the light beams by shaping

light that is emitted from the arc tube and reaches the condensed spot after reflection by the first

reflector portion and the second reflector portion or after condensation by the lens, into a

designated pattern and by mixing by multiple reflection is integrally provided at a front end of

the reflector, forming an enclosed structure of the reflector.

(Previously Presented) The enclosed light source device according to Claim 1, wherein

the reflector is formed of an aluminum substrate, a layer for converting an infrared component

into heat is formed on a reflecting surfaces of the first reflector portion and the second reflector

portion, a dielectric reflection multi-coating is formed over the layer for heat conversion with a

flattening layer provided in-between, so that visible light rays reach the predetermined

condensed spot.

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7. (Previously Presented) The enclosed light source device according to Claim 5, wherein

the luminance equalization means has a cylindrical configuration and is formed of a metal

substrate of the same material as the reflector, and an interior side of the metal substrate of the

luminance equalization means is formed with a layer for converting an infrared component into

heat, a flattening layer on the layer for heat conversion and a dielectric reflection multi-coating

over the flattening layer.

8. (Previously Presented) The enclosed light source device according to Claim 1, wherein

sealed portions that seal the leads of the main electrodes are formed on both sides of the light

generation point of the arc tube, and heat radiation members are arranged between the sealed

portions and the reflector.

9. (Previously Presented) The enclosed light source device according to Claim 1, wherein

the reflector has a separable structure such that it can be separated at a boundary containing the

electrode axis of the arc tube into a first reflector part that forms the first reflector portion and a

second reflector part that forms the second reflector portion, and a light source fitting groove in

which the sealed portions of the arc tube are arranged is formed in a separated face of the

separable structure.

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10. (Previously Presented) The enclosed light source device according to Claim 1,

wherein the reflector has a separable structure such that it can be separated along a plane parallel

to the optical axis.

11. (Previously Presented) The enclosed light source device according to Claim 8,

wherein the reflector is grounded and an annular auxiliary electrode that encloses a proximal end

side of the sealed portion of the arc tube is provided and the auxiliary electrode is electrically

connected to the reflector.

12. (Previously Presented) A video display apparatus, comprising:

the enclosed light source device according to Claim 1.

13. (New) The enclosed light source device according to Claim 1, wherein the lens

includes a glass material that will not deteriorate under a high-temperature atmosphere in a

vicinity of the arc tube.

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